

Alpha Magnetic Spectrometer Weekly Reports



July 23, 2004

Upcoming Events:

- Thermal Control System (TCS) Delta Critical Design Review (ΔCDR) October 2004 JSC
- Tracker Thermal Control System (TTCS) PDR January 2005, CDR April 2005
- STA Vacuum Case Delivery (on dock at STADCO) October 22, 2004
- Flight Vacuum Case Delivery (on dock at STADCO) November 3, 2004
- AMS General TIM October 18 22, 2004 JSC
- AMS General TIM January 10 14, 2005 KSC
- AMS-02 Avionics Functional Interface Test (FIT) January 2005
- AMS-02 Phase II Safety Review March 2005 JSC

Upcoming Tests:

- O-Ring Test Fixture (OTF) Vacuum Test On going J13
- STA Acoustic Test Date TBD ESTEC Noordwijk, Netherlands (Schedule under review)
- STA Sine Sweep Test Date TBD INFN Terni, Italy (Schedule under review)
- Full Assembly Modal & Static Tests Date TBD IABG Munich, Germany
- Interface Plate Static Test Date TBD Location TBD
- Lower Joint Static Test Date TBD Location TBD

Status:

 LMSO Alpha Magnetic Spectrometer (AMS) personnel supported the AMS General Technical Interchange Meeting (TIM) July 19 - 23, 2004 at the Center for European Nuclear Research (CERN) in Geneva, Switzerland. A status of outstanding Safety Data Package items and a plan for the Phase II Safety Review were presented at the TIM.



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- Preparations are underway for the inaugural meeting of the AMS-02 Configuration Control Board
 (CCB) to be conducted on August 4, 2004. A draft agenda for the meeting was prepared. Change
 Requests (CRs) were drafted to baseline the Project Plan, the Configuration Management Plan
 (CMP), and the Project Technical Requirements Specification (PTRS). Work was initiated on
 updating the AMS-02 Engineering Directorate (EA) Internal Website to add links for the CCB
 agendas, minutes and forms (with preparation and submittal instructions).
- The drawings for the Primary Support Stand (PSS) were updated.
- The drawings for Payload Integration Hardware (PIH) Interfaces are in the process of being updated for inclusion in the AMS-02 Experiment/Payload Integration Hardware (PIH) Interface Control Document (ICD).
- Work is continuing on the incorporation of design changes and drawing redlines into the Vacuum
 Case Test Fixture (VCTF) drawings. New drawings are being created as required. The Rotation
 Frame was redesigned to simplify the structure and reduce fabrication costs.

Vacuum Case Activity at STADCO

- STADCO informed LMSO of another schedule slip for the Structural Test Article (STA) Vacuum Case delivery. LMSO Procurement informed STADCO that this slip was unacceptable and to re-evaluate their schedule to bring the delivery back to October 13, 2004. STADCO was informed that any more schedule slips should be brought to LMSO for review before being implemented and that LMSO has the right to reject the slip if the reasons are not acceptable.
- The Vacuum Case (VC) project engineer at STADCO was retained and promoted to Vice President of Engineering. This new position will give him the power over all disciplines of the VC Project at STADCO and should help in getting the deliveries back on schedule.

Vacuum Case Milestones

- STA Support Rings Complete July 2004
- Weld Development Complete July 2004
- Flight Support Rings Complete July 2004
- First Article Weld Complete July 2004
- STA Conical Flanges Complete July 2004



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- o Shipping Fixture Complete August 2004
- o STA Line Drill Operations Complete August 2004
- Flight Conical Flanges Complete August 2004
- STA Match Drill Procedure Complete August 2004
- o STA Weld Complete (for proof test @ STADCO) August 2004